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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,346	11/06/2003	Daniel J. Bratek	IS01350AP	8107

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EXAMINER

CÔZART, JERMIE E

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/702,346

Applicant(s)

BRATEK ET AL.

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/6/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of claims 1-12 in the reply filed on 10/3/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Specification***

2. The disclosure is objected to because of the following informalities: On page 1, line 24, "applied" is objected to because no period immediately follows. Therefore, it is suggested to insert - .- - immediately following "applied". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepperling et al. (6,715,360) in view of Ito et al. (5,158,390).

Pepperling discloses assembling a high pressure sensor (72) with a press-fit, which has a pressure port (74) having a material inherently with a first hardness and a housing (90), the pressure port having a mounting boss (78) and the housing having a receptacle (not labeled, fig. 3) for receiving the mounting boss. A shoulder (not labeled,

fig. 3) is configured on the mounting boss, and the mounting boss (78) is pressed into the receptacle of the housing (90) up to the shoulder. The mounting boss (78) appears to have a bevel end configuration (fig. 3). Pepperling discloses applying a seal (i.e. adhesive, col. 4, lines 23-25) to the press-fit area to seal the pressure port. *See column 3, line 59, - column 4, line 31, and figure 3 for further clarification.*

Pepperling, however, does not disclose the following: the housing having a second hardness less than the first hardness; the mounting boss of the pressure port being configured with knurls thereon; the knurls oriented parallel to an axis of the pressure port, or pressing the mounting boss of the pressure port into the receptacle of the housing along a direction of the axis such that the knurls deform the receptacle of the housing to conform about the knurls to define a semi-rigid mount; providing a stainless steel pressure port and an aluminum housing; providing a length of the knurls that is less than a depth of the receptacle; configuring the knurls of the mounting boss and the receptacle to have an interference fit; configuring the mounting boss with straight knurls; applying a seal to the press fit area to seal the pressure port; configuring the straight knurls to have bevel on an end thereof.

Ito discloses a housing (1) having a second hardness less than the first hardness, wherein the mounting boss (4) is configured with straight knurls thereon oriented parallel to an axis of the member (3). The mounting boss (4,5) is pressed into the receptacle (2) of the housing (1) to conform about the knurls to define a semi-rigid mount. The housing (1) is comprised of aluminum, and the member (3) is comprised of stainless steel. A length of the knurls (i.e. peaks and valleys 4, 5) is provided that is

less than a depth of the receptacle (2, fig. 3c), wherein the knurls of the mounting boss and the receptacle are configured to have an interference fit (i.e. press-fit). *See column 3, line 23 – column 4, line 57; column 6, lines 36-35; and figure 3c for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to the provide housing of Pepperling with a second hardness less than the first hardness, provide the mounting boss of the pressure port with straight knurls thereon such that the knurls are oriented parallel to an axis of the pressure port, press the mounting boss of the pressure port into the receptacle of the housing along a direction of the axis such that the knurls deform the receptacle of the housing to conform about the knurls to define a semi-rigid mount, provide the pressure port as stainless steel and the housing as aluminum, provide a length of the knurls that is less than a depth of the receptacle, configure the knurls of the mounting boss and the receptacle to have an interference fit, and configure the straight knurls to have bevel on an end thereof, in light of the teachings of Ito, in order to firmly join steel and aluminum components to one another by press-fit.

Regarding **claim 12**, Pepperling/Ito discloses all of the claimed subject matter except for using silicon glue as the seal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use silicon glue as the seal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the attached to show pressure sensors and the assembly of components by press-fit.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jermie Cozart  
Examiner  
Art Unit 3726